

WHAT IS CLAIMED IS:

Sub B3 1. A method of treatment of a blood vessel in which fluid flows proximally to distally, said method comprising:

5 utilizing an expandable device to inhibit emboli suspended in said fluid from migrating in a proximal to distal direction;

utilizing fluid pressure within said vessel to inhibit migration of said emboli in a distal to proximal direction;

10 advancing a catheter having a lumen in fluid communication with a distal opening in the catheter, said advancing comprising moving said distal opening relative to said expandable device within the blood vessel such that said opening is distal to at least a portion of an occlusive substance within said blood vessel, said occlusive substance comprising said emboli suspended in said fluid;

15 drawing fluid from the vessel into the distal opening such that (a) a fluid flow is created in the lumen in a distal to proximal direction, and (b) said fluid flow is simultaneously created in said vessel in a proximal to distal direction, whereby said emboli are carried by said fluid flow from said vessel into said distal opening and through said lumen of said catheter.

20 2. The method of Claim 1, wherein the occlusive substance additionally comprises material on a wall of the vessel.

Sub B4 3. The method of Claim 1, wherein said advancing comprises moving said distal opening such that said opening is distal to at least some of the emboli.

4. The method of Claim 1, further comprising moving the distal opening in the catheter relative to the expandable device during said drawing of fluid.

25 5. The method of Claim 1, wherein said expandable device is an occlusive device.

6. The method of Claim 5, wherein said occlusive device is an inflatable balloon.

7. The method of Claim 1, further comprising advancing a guide catheter until a distal end of the guide catheter is positioned proximal to the emboli, and wherein said catheter is advanced through said guide catheter.

5 8. The method of Claim 1, wherein said blood vessel comprises a saphenous vein graft.

9. The method of Claim 8, wherein said fluid pressure is provided by blood from the aorta.

10 10. The method of Claim 1, wherein said blood vessel comprises a carotid artery.

11. The method of Claim 1, wherein the emboli are located in a segment of the blood vessel having substantially no side branches.

12. A method for the evacuation of emboli from a blood vessel comprising:
positioning a catheter having a lumen in fluid communication with a distal opening in the catheter such that said opening is distal to at least a portion of an occlusive substance within said blood vessel, said occlusive substance comprising said emboli suspended in fluid;

drawing fluid from the vessel into the distal opening such that emboli are carried by said fluid flow from said vessel into said distal opening and through said lumen of said catheter; and

20 moving the distal opening in the catheter until it is proximal to said occlusive substance during the drawing of fluid into the distal opening.

13. The method of Claim 12, wherein said drawing fluid further comprises creating a fluid flow in the lumen in a distal to proximal direction, and simultaneously creating fluid flow in the vessel in a proximal to distal direction.

25 14. The method of Claim 12, wherein the distal opening in the catheter is positioned distal to at least a portion of the occlusive substance more than once during the drawing of fluid.

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